

United States Patent and Trademark Office

MA

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/542,225	07/14/2005	Kenji Kono	81887.0128	3354
	26021 HOGAN & H <i>A</i>	7590 09/28/2007 ARTSON L.L.P.		EXAMINER	
	1999 AVENUE OF THE STARS		HO, HUY C		
	SUITE 1400 LOS ANGELE	S. CA 90067		ART UNIT	PAPER NUMBER
	,	,		2617	
	•			MAIL DATE	DELIVERY MODE
				09/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/542,225	KONO, KENJI				
Office Action Summary	Examiner	Art Unit				
	Huy C. Ho	2617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
	Responsive to communication(s) filed on <u>30 August 2007</u> .					
·—						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 01/23/2006 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate				

Application/Control Number: 10/542,225 Page 2

Art Unit: 2617

DETAILED ACTION

Response to Arguments

- 1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
- 2. Applicant's arguments, filed 08/30/2007, with respect to the rejection(s) of claim(s) 1-12 under Ahmed (6,782,261), in view of Hideki (JP 2001-128210) and further in view of Zhao (7,006,473) and Stanislaw (JP 2000-201369) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shi (6,320,855) and further in view of Andrus et al. (2003/0203735) and Petersson et al. (7,016,320).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2617

5. Claims 1-4, 6-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi (6,320,855) and further in view of Andrus et al. (2003/0203735).

Consider claim 1, (Original) Shi discloses a wireless communication terminal (see the abstract), comprising:

a measurement section that measures quality of a signal transmitted from a base station (col 5 lines 15-20, 50-67, col 6 lines 1-45);

a determination section that determines whether or not handoff is to be performed based on a measurement result of the measurement section and a criterion of the determination of the handoff (col 5 lines 15-20, 50-67, col 6 lines 1-45, col 8 lines 50-65, an improved designed parameter M and N being introduced besides a conventional handoff parameter H), and

a handoff section that performs the handoff based on a determination result of the determination section (col 5 lines 15-20, 50-67, col 6 lines 1-45),

wherein the determination section changes the criterion of the determination of the handoff when the handoff section performs the handoff (col 5 lines 15-20, 50-67, col 6 lines 1-45, col 7 lines 30-67, col 8 lines 1-65).

Shi does not show a repetition pattern. Andrus discloses a repetition pattern (see sections [6], [27]).

Since both Shi and Andrus teach method and system for idle handoff, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Shi, and have repetition pattern, taught by Andrus, to improve the method and apparatus for idle handoff with neighbor channel, as discussed by Andrus (see sections [1]-[10]).

Consider claim 7, (Previously presented) Shi discloses a handoff determination method of a wireless communication terminal which performs wireless communication using each of a first communication method and a second communication method and enables to be in an idle state condition

Art Unit: 2617

with both methods (see the abstract), the handoff determination method comprising the steps of:

measuring quality of a signal transmitted from a base station (col 5 lines 15-20, 50-67, col 6 lines 1-45);

determining whether or not a handoff is to be performed based on a measurement result and a criterion of the determination of the handoff (col 5 lines 15-20, 50-67, col 6 lines 1-45, col 8 lines 50-65, an improved designed parameter M and N being introduced besides a conventional handoff parameter H);

performing the handoff based on a determination result (col 5 lines 15-20, 50-67, col 6 lines 1-45); and

changing the criterion of the determination of the handoff when the handoff section performs the handoff ((col 5 lines 15-20, 50-67, col 6 lines 1-45, col 8 lines 50-65).

Shi does not show a repetition pattern. Andrus discloses a repetition pattern (see sections [6], [27]).

Since both Shi and Andrus teach method and system for idle handoff, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Shi, and have repetition pattern, taught by Andrus, to improve the method and apparatus for idle handoff with neighbor channel, as discussed by Andrus (see sections [1]-[10]).

Consider claims 2, 8, (Original) The wireless communication terminal according to claims 1, 7, Shi, as modified by Andrus, further discloses wherein the determination section changes the criterion of the determination of the handoff when a predetermined repetition of two pilot signals is acquired (col 7 lines 30-67, col 8 lines 1-65).

Consider claims 3, 9, (Original) The wireless communication terminal according to claims 2, 8 Shi, as modified by Andrus, discloses wherein when qualities of the two pilot signals acquired repeatedly are equal to or greater than a predetermined value, the criterion of the determination of the handoff is Art Unit: 2617

changed (sections [27]-[28]).

Consider claims 4, 10, (Original) The wireless communication terminal according to claims 1, 7, Shi, as modified by Andrus, further discloses:

a detection section that detects time during which a preceding pilot signal is acquired every time handoff is performed, wherein the determination section changes the criterion of the determination of the handoff based on the time detected by the detection section (col 7 lines 5-65).

Consider claims 6, 12, (Original) The wireless communication terminal according to any one of claims 1 to 5, or claims 7 to 11, Shi, as modified by Andrus, further discloses wherein the wireless communication terminal enables to be in an idle state condition with both methods of cdma2000 lx method and lxEVDO method, and the determination section is used as section for determining a handoff of cdma2000 lx method (col 6 lines 60-67, col 7 lines 1-30).

6. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi (6,320,855) and further in view of Petersson et al. (7,016,320).

Consider claim 5, (Previously presented) Shi discloses a wireless communication terminal comprising:

a measurement section that measures quality of a signal transmitted from a base station (col 5 lines 15-20, 50-67, col 6 lines 1-45);

a determination section that determines whether or not handoff is to be performed based on a measurement result of the measurement section and a criterion of the determination of the handoff (col 5 lines 15-20, 50-67, col 6 lines 1-45, col 8 lines 50-65, an improved designed parameter M and N being introduced besides a conventional handoff parameter H); and

a handoff section that performs the handoff based on a determination result of the determination section (col 5 lines 15-20, 50-67, col 6 lines 1-45),

Art Unit: 2617

wherein the determination section determines whether or not the handoff is to be performed based on a value obtained by the measurement result of the measurement section immediately after a prior handoff is performed, and determines whether or not the handoff is to be performed based on a value obtained by the measurement result of the measurement section after a lapse of a predetermined period since the prior handoff is performed (col 5 lines 15-20, 50-67, col 6 lines 1-45, col 7 lines 5-67, col 8 lines 1-67, col 9 lines 1-45).

Shi does not show time-averaging, number-averaging (col 6 lines 37-45, col 8 lines 45-67, col 17 lines 30-45, col 18 lines 15-30, col 20 lines 25-40).

Since both Shi and Petersson teach method and system for handoff, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Shi, and have time-averaging, number-averaging, taught by Petersson, to improve the method and system for carrying out inter-frequency measurement between mobile stations and base stations in a communication system, as discussed by Petersson (see col 1 lines 9-67, col 2 lines 1-67, col 3 lines 1-35, col 4 lines 20-67).

Consider claim 11, (Previously presented) Shi discloses a handoff determination method comprising the steps of:

measuring quality of a signal transmitted from a base station (col 5 lines 15-20, 50-67, col 6 lines 1-45);

determining whether or not a handoff is to be performed based on a measurement result and a criterion of the determination of the handoff (col 5 lines 15-20, 50-67, col 6 lines 1-45, col 8 lines 50-65, an improved designed parameter M and N being introduced besides a conventional handoff parameter H); and

performing the handoff based on a determination result, wherein whether or not the handoff is to be performed is determined based on a value obtained by the measurement result of the measurement section immediately after a prior handoff is performed, and whether or not the handoff is to be performed is determined based on a value obtained by the measurement result of the measurement section after a lapse of a predetermined period since the prior handoff is performed (col 5 lines 15-20, 50-67, col 6 lines 1-45, col 7 lines 5-67, col 8 lines 1-67, col 9 lines 1-45).

Shi does not show time-averaging, number-averaging (col 6 lines 37-45, col 8 lines 45-67, col 17 lines 30-45, col 18 lines 15-30, col 20 lines 25-40).

Since both Shi and Petersson teach method and system for handoff, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Shi, and have time-averaging, number-averaging, taught by Petersson, to improve the method and system for carrying out inter-frequency measurement between mobile stations and base stations in a communication system, as discussed by Petersson (see col 1 lines 9-67, col 2 lines 1-67, col 3 lines 1-35, col 4 lines 20-67).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy C. Ho whose telephone number is (571) 270-1108. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-

Art Unit: 2617

25 Page 8

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

CANADA) or 571-272-1000.

DUC M. NGUYEN SUPERVISORY PRIMARY EXAMINER

SUPERVISORY PRIMARY EXAMINER TECHNOLOGY CENTER 2600